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10/757,300

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Christopher J. Lord

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EXAMINER

JONES, HEATHER RAE

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2621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/757,300 | Applicant(s) LORD ET AL. | |
| | Examiner HEATHER R. JONES | Art Unit 2621 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed September 5, 2008 have been fully considered but they are not persuasive.

The Applicant argues that Matsumoto et al. fails to disclose annotating the differential information to the video bit stream as an annotation to the video frame data for the current video frame only if the differential information indicates a change from the current state of the auxiliary information. The Examiner respectfully disagrees. Matsumoto et al. discloses in col. 15, lines 21-30 and col. 15, line 47 – col. 16, line 8 that the differential operator performs its differential operation between the main and sub picture images with the main picture image used as a reference picture image and then sends the calculation results to the image compressor in order to compress the results with the image. Also, in Fig. 42 Matsumoto et al. displays the annotated differential information in the attribute data. Furthermore, the annotated differential information indicates a change from the reference frame to the other frames and if there is no change from the reference frame to the other frames then no differential information would be needed. Therefore, Matsumoto et al. meets the claimed limitations and the rejection is maintained.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

Art Unit: 2621

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 11, 16, and 23 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 8, and 14 of U.S. Patent No. 6,842,190 in view of Matsumoto et al. (U.S. Patent 6,590,608). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 11, 16, and 23 of the current application encompass the claims 1, 8, and 14 of U.S. Patent 6,842,190. However, Patent 6,842,190 fails to disclose the claim limitation of annotating the differential information to the video bit stream as an annotation to the video frame data for the current video frame only if the differential information indicates a change from the current state of the auxiliary information. Referring to the Matsumoto et al. reference, Matsumoto et al. discloses annotating to the video frame data for the current video frame only if the differential information indicates a change from the current state of the auxiliary information (col. 15, lines 21-30; col. 15, line 47 – col. 16, line 8). Therefore, it would have been obvious to one skilled in the art at the time the

Art Unit: 2621

invention was made to have only annotated the differential information when indicating a change in order to save space when recording and avoiding filling up the recording medium with useless information.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7 and 9-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsumoto et al. (U.S. Patent 6,590,608).

Regarding claim **1**, Matsumoto et al. discloses a method comprising:
maintaining a current state of auxiliary information regarding a first frame of a sequence of video frames in storage in a local memory, the sequence of video frames being encoded as a video bit stream having video frame data for each respective video frame of the sequence of video frames (col. 15, lines 21-30);
comparing the stored current state of auxiliary information with auxiliary information regarding a later current video frame of the sequence of video frames to determine differential information (col. 15, lines 21-30; col. 15, line 47 – col. 16, line 8); annotating the differential information to the video bit stream as an

annotation to the video frame data for the current frame (Figs. 39-42; col. 16, lines 51-61) only if the differential information indicates a change from the current state of the auxiliary information (col. 15, lines 21-30; col. 15, line 47 – col. 16, line 8).

Regarding claim **2**, Matsumoto et al. discloses all the limitations as previously discussed with respect to claim 1 including that the current state of auxiliary information indicates the latest encoded information (col. 15, lines 47-49 – the latest information is stored in the buffer because the buffer is a first in first out type buffer where the older data information is discarded).

Regarding claim **3**, Matsumoto et al. discloses all the limitations as previously discussed with respect to claim 1 including that the auxiliary information comprises additional non-visual information regarding video frames (col. 5, line 63 – col. 6, line 2).

Regarding claim **4**, Matsumoto et al. discloses all the limitations as previously discussed with respect to claim 1 including that the auxiliary information comprises video processing information regarding video frames (col. 5, line 63 – col. 6, line 2; col. 15, lines 21-30; col. 15, line 47 – col. 16, line 8).

Regarding claim **5**, Matsumoto et al. discloses all the limitations as previously discussed with respect to claim 1 as well as further comprising encoding the differential information before annotating the differential information (col. 15, lines 27-30).

Regarding claim **6**, Matsumoto et al. discloses all the limitations as previously discussed with respect to claims 1 and 5 including that the encoded differential information comprises a list of parameters; the parameters being described in a tag lookup table (Figs. 27 and 28; col. 13, lines 21-27).

Regarding claim **7**, Matsumoto et al. discloses all the limitations as previously discussed with respect to claim 1 including that annotating the differential information comprises extending the video bit stream format to include the differential information (Fig. 42 - annotating the differential information will make the picture data files larger thereby extending the video bit stream).

Regarding claim **9**, Matsumoto et al. discloses all the limitations as previously discussed with respect to claim 1 as well as the method further comprising gathering the video information regarding the current video frame (Figs. 27, 28, and 39-43 – displays the gathered information; col. 15, lines 21-30).

Regarding claim **10**, Matsumoto et al. discloses all the limitations as previously discussed with respect to claims 1 and 9 including that the differential information comprises the difference between the current state of the auxiliary information and the gathered information (col. 15, line 47 – col. 16, line 8).

Regarding claims **11-15**, these are machine-readable medium claims corresponding to the method claims 1-3, 6, and 7. Therefore, claims 11-15 are analyzed and rejected as previously discussed with respect to claims 1-3, 6, and 7.

Regarding claims **16-22**, these are apparatus claims corresponding to the method claims 1-6. Therefore, claims 16-22 are analyzed and rejected as previously discussed with respect to claims 1-6.

Regarding claim **23**, this is an apparatus claim corresponding to the method claims 1, 2, 6, and 7 combined. Therefore, claim 23 is analyzed and rejected as previously discussed with respect to the combination of claims 1, 2, 6, and 7.

Regarding claim **24**, Matsumoto et al. discloses all the limitations as previously discussed with respect to claim 16 including that the auxiliary information comprises additional non-visual information regarding camera geometry and identification for the video frames (Figs. 26-28; col. 13, lines 6-27).

Regarding claim **25**, Matsumoto et al. discloses all the limitations as previously discussed with respect to claim 16 including that the auxiliary information comprises video processing information regarding descriptions and camera positions for the video frames (Figs. 26-28; col. 13, lines 6-27).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 2621

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER R. JONES whose telephone number is (571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/757,300
Art Unit: 2621

Page 9

Heather R Jones
Examiner
Art Unit 2621

HRJ
December 4, 2008

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621